

30. A method for displaying a shape the method comprising:
receiving a command to generate the shape, the shape to be displayed a particular size on a display,
requesting a bit map rendering of the shape in which the shape has a size larger than the particular size, wherein
various portions of the bit map correspond to a pixel; and
among the various bits that correspond to the pixel, different bits correspond to different locations on the character;
based on a percentage of bits that are on in respective portions of the bit map, determining luminances for the corresponding pixels of a rendering of the shape on the display having the particular size; and
displaying the shape on the display in the particular size with the pixels the determined luminances.

The Office Action states that claim 30 is rejected based on a similar rationale as independent claim 16 and dependent claims 2, 5 and 7. Applicant does not believe that the reasoning in the Office Action with respect to such claims applies to claim 30. In particular, claim 30 includes receiving a command to generate the shape, the shape to be displayed a particular size on a display. Claim 30 further includes requesting a bit map rendering of the shape in which the shape has a size larger than the particular size. In contrast, Nishida teaches a general purpose display signal applied commonly to various hardware. See Nishida at column 18, lines 19-21. Thus, Nishida fails to teach receiving a command to display a shape a particular size, and requesting a bit map rendering of the shape larger than the particular size. Rather, since Nishida teaches a generic display signal, there is no teaching of receiving a command to display a shape a particular size, and then to request a bit map rendering of the shape larger than that particular size.

The Office Action indicates that it is well known in the art that for an image to be displayed on a display device, the display attributes are necessary for displaying the image

correctly. However, Nishida still teaches a generic display signal. In fact, Nishida states "... even if the device body 100 is exchanged into a hardware having higher resolution, or even if it is exchanged into a hardware having lower resolution, it is sufficient that control unit 40 delivers entirely the same display signal." (Nishida, column 18, lines 30-33) Of course, the signal is later displayed on a device with display attributes. However, Nishida does not teach receiving a command to display a shape a particular size, and then requesting a bit map rendering of the shape larger than that particular size as claimed in claim 30.

The Office Action states that Nishida discloses a number of bits larger than the divisional level of the display for displaying the shape to be displayed on column 11, lines 16-67 of Nishida. (See Office Action, page 9) However, as discussed above, Nishida still does not teach receiving a command to display a shape a particular size, and then requesting a bit map rendering of the shape larger than that particular size as claimed in claim 30.

The Office Action also states that Nishida discloses display signals corresponding to the resolutions of display devices to select commands to display the picture at a corresponding resolution of the divisional level, citing column 22, lines 49-67 of Nishida. However, note that the cited portion of Nishida teaches devices selecting a command in conformity with their own resolution." (Nishida, column 22, lines 49-51) Thus, Nishida is not teaching requesting a bit map rendering of the shape larger than the particular size in which the shape is to be displayed as claimed in claim 30, because Nishida is teaching selection of a command in conformity with the device's resolution. Further, this section of Nishida is teaching selection of an already existing command, rather than requesting a bit map rendering of a shape larger than the particular size in

which the shape is to be displayed. Thus, Nishida still teaches creation of a general purpose display signal. In the cited section, however, Nishida teaches that the devices may select a particular command in conformity with their own resolution.

Thus, even in combination, the cited references fail to teach or suggest claim 30. Accordingly, removal of the rejection of claim 30 is respectfully requested. Removal of the rejection of claims 31-38 is also respectfully requested, such claims being patentable for at least the reasons as to their parent claim as well as independently patentable.

Claim 68 recites (according to the requested amendment) (emphasis added):

68. A method of displaying a set of characters, the method comprising:
in a system having a specific hardware display device that has a specific resolution, receiving a command to generate a character from the set of characters;
if the character has already been processed and is available in a cache, displaying the character;
if the character has not already been processed, taking the resolution of the hardware display device into consideration, determining a representation of a character in a bit map having a number of bits greater than a number of pixels in a region of the display device in which the character is to be displayed wherein
various bits in a respective portion of the bit map corresponding to a pixel;
and
among the various bits that correspond to the pixel, different bits correspond to different locations on the character;
based on a percentage of bits that are on in respective portions of the bit map, determining luminance for corresponding pixels; and
displaying the character in the region having the particular number of pixels, the pixels being displayed with the determined luminance.

It is believed that the cited references fail to teach the invention of claim 68. For example, the references fail to teach if a character has already been processed and is available in a cache, displaying the character, and if the character has not already been processed,

determining a representation of a character in a bit map having a number of bits greater than a number of pixels in a region of the display device in which the character is to be displayed.

It is further believed that there is no motivation in the references to achieve the invention as claimed in claim 68. The cited portion of Nishida that discusses a divisional mode finer than the actual display elements is directed to display of a "common display signal" provided to different devices. (See Nishida at column 18, lines 34 - 56) The goal in this portion of Nishida is thus to display the common display signal. There is no discussion of trying to solve the problem of anti-aliasing a character. Since Nishida does not recognize this problem, there would be no motivation to modify Nishida to solve the problem, or to provide an improved solution of storing anti-aliased characters in a cache for later use. Although the claims do not require anti-aliasing, the invention can be used to solve this problem. Nishida is not directed to solving this problem. Thus, in view of Nishida, one would not have been motivated to arrive at the invention of claim 68.

Thus, one would not be motivated to display some characters if the character has not been processed and is available in a cache, but, for other characters, determine a representation of the character in a bit map having a number of bits greater than a number of pixels in a region of the display device in which the character is to be displayed.

The Office Action states that it would have been obvious to include storing processed characters to deliver high speed operations. The Office Action points to no teaching or suggestion in the references for this statement. Further, even in view of an attempt to achieve high speed operations, one would not be motivated to modify Nishida to achieve the invention.

Thus, the Office Action has failed to make a prima facie case of obviousness. Nishida provides no teaching of displaying a set of characters with the goal that some of the characters are to be repeated later. Thus, since Nishida, does not provide a teaching of displaying characters with the goal that some of the characters may be repeated later, there exists no motivation in Nishida to display character that has already been processed and is available in a cache as claimed in claim 68. The vague aspiration of achieving high speed operations would not have motivated one to modify Nishida to achieve the particular solution claimed in claim 68.

Further, as noted above, Nishida is directed to display of a "common display signal" provided to different devices. (See Nishida at column 18, lines 34 et seq.) The goal in this portion of Nishida is thus to display the common display signal. It is not clear from Nishida whether one would want to query a memory for a character, because the stated goal is to display the actual common display signal. If one were to use a cache, the goal of displaying the common display signal would not be accomplished, since the information is obtained from the cache, rather than from the common display signal that is to be displayed. Thus, for this additional reason, Nishida fails to teach or suggest the invention claimed in claim 68.

Amendments

Applicant has requested cancellation of claims 16-29 and 39-66 without prejudice and amendment of claim 68 as set forth above under 37 C.F.R. § 1.116. The amendment of claim 68 clarifies antecedent basis of an element. Therefore, the amendment of claim 68 presents the

claim in better condition for consideration on appeal, and such an amendment may be admitted under 37 C.F.R. § 1.116.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

CONCLUSION

It is submitted that the present application is in form for allowance, and such action is respectfully requested.

The Commissioner is authorized to charge any additional fees that may be required, including petition fees and extension of time fees, to Deposit Account No. 23-2415 (Docket No. 17201.706).

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Please amend without prejudice claim 68 as indicated below:

68. A method of displaying a set of characters, the method comprising:

in a system having a specific hardware display device that has a specific resolution, receiving a command to generate a [the] character from the set of characters;

if the character has already been processed and is available in a cache, displaying the character;

if the character has not already been processed, taking the resolution of the hardware display device into consideration, determining a representation of a character in a bit map having a number of bits greater than a number of pixels in a region of the display device in which the character is to be displayed wherein

various bits in a respective portion of the bit map corresponding to a pixel; and

among the various bits that correspond to the pixel, different bits correspond to different locations on the character;

based on a percentage of bits that are on in respective portions of the bit map, determining luminance for corresponding pixels; and

displaying the character in the region having the particular number of pixels, the pixels being displayed with the determined luminance.